

REMARKS

The Office Action dated August 4, 2005, has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

Claims 53-104 are currently pending in the application, of which claims 53, 67, 81, 86, and 100 are independent claims. All of claims 53-104 are respectfully submitted for consideration in view of the following remarks.

Claim 82 is listed as rejected in the Office Action summary, but the detailed action does not contain any rejection of claim 82. It is therefore respectfully requested that if claim 82 is rejected in a future Office Action, that such an Office Action be non-final.

Claims 53-54, 56-57, 60, 62-68, 70-71, 74, 80-81, 86-87, 89-90, 93, and 99-101 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,584,331 of Ranta ("Ranta"). Applicant respectfully traverses this rejection.

Independent claim 53, upon which claims 54-66 depend, is directed to a method of adjusting mobility management in a mobile communication network. The mobile communication network includes a mobility control unit adapted to track location of communication units communicating in said mobile communication network and to control the mobility management for said communication units. The method includes providing said mobility control unit with mobility information related to a communication unit, evaluating the degree of mobility of said communication unit from said mobility information related to said communication unit, and, when said step of evaluating indicates the immobility of said communication unit, adjusting, by said

mobility control unit, values of timer elements of said communication unit and said mobility control unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit.

Independent claims 67, upon which claims 68-80 depend, is directed to a mobility control unit in a mobile communication network, said mobility control unit being adapted to track location of communication units communicating in said mobile communication network and to control the mobility management for said communication units. The mobility control unit includes means adapted to receive mobility information related to a communication unit, means adapted to evaluate the degree of mobility of said communication unit from said mobility information related to said communication unit, and means adapted to adjust, when said means adapted to evaluate indicates the immobility of said communication unit, values of timer elements of said communication unit and said mobility control unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit.

Independent claim 81, upon which claims 82-85 depend, is directed a communication unit used in connection with a mobile communication network, said mobile communication network comprising a mobility control unit adapted to track

location of communication units communicating in said mobile communication network and to control the mobility management for said communication units. The communication unit is adapted to send mobility information related to said communication unit, said mobility information being usable by said mobility control unit to evaluate the degree of mobility of said communication unit, and to set values of timer elements of said communication unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit, on the basis of predefined changed periodic update timer values and/or predefined changed mobility management parameters received from said mobility control unit in response to the sending of said mobility information.

Independent claim 86, upon which claims 87-99 depend, is directed to a mobility management adjustment system used in a mobile communication network. The mobility management adjustment system includes a communication unit and a mobility control unit, said mobility control unit being adapted to track location of communication units communicating in said mobile communication network and to control the mobility management for said communication units. The mobility control unit includes means adapted to receive mobility information related to a communication unit, means adapted to evaluate the degree of mobility of said communication unit from said mobility information related to said communication unit, and means adapted to adjust, when said

means adapted to evaluate indicates the immobility of said communication unit, values of timer elements of said communication unit and said mobility control unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit.

Independent claim 100, upon which claims 101-104 depend, is directed to a mobility management adjustment system according to claim 86, wherein said communication unit is adapted to send mobility information related to said communication unit, said mobility information being usable by said mobility control unit to evaluate the degree of mobility of said communication unit, and to set values of timer elements of said communication unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit, on the basis of predefined changed periodic update timer values and/or predefined changed mobility management parameters received from said mobility control unit in response to the sending of said mobility information.

It is respectfully submitted that Ranta does not disclose or suggest all of the elements of any of the presently pending claims.

Ranta is directed to a reduction of power consumption of a mobile station on the basis of a function of a presence or absence of motion of the mobile station. RSSI measurements and the like as well as GPS are used as parameters for the function wherein a so-called motion indicator $C(n)$ is calculated. In a reduced mode of the mobile, the cellular positioning system is adjusted to output position vectors less frequently than in a normal mode, as explained at col. 8, ll. 8-13 of Ranta.

Independent claims 53, 67, 81, 86, and 100 recite limitations that Ranta does not disclose or suggest, at least as follows: “when said step of evaluating indicates the immobility of said communication unit, adjusting, by said mobility control unit, values of timer elements of said communication unit and said mobility control unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit” (claim 53), “means adapted to adjust, when said means adapted to evaluate indicates the immobility of said communication unit, values of timer elements of said communication unit and said mobility control unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit” (claim 67), “to set values of timer elements of said communication unit to a maximum timer value or a timer value being higher than a default timer value of

said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit, on the basis of predefined changed periodic update timer values and/or predefined changed mobility management parameters received from said mobility control unit in response to the sending of said mobility information” (claim 81), “means adapted to adjust, when said means adapted to evaluate indicates the immobility of said communication unit, values of timer elements of said communication unit and said mobility control unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit.” (claim 86), and “to set values of timer elements of said communication unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit, on the basis of predefined changed periodic update timer values and/or predefined changed mobility management parameters received from said mobility control unit in response to the sending of said mobility information” (claim 100).

It may be seen from an examination of the features identified above that all have the common aspect of adjusting or setting timer elements (plural) to a maximum timer value or a timer value higher than a default timer value, wherein the timer elements

define a period of a ready state of a communication unit and/or a time period for performing a location update for the communication unit. It is respectfully submitted that Ranta does not disclose or suggest the above-identified features.

The Office Action suggests that Ranta, at col. 8, ll. 8-11, discloses the above-identified limitations. However, a detailed examination of Ranta indicates that Ranta discloses something different. The Office Action asserts that although Ranta does not explicitly describe any timer elements, Ranta inherently discloses a “timer element that is adjusted.” It is respectfully noted that the claims all recite “timer elements,” plural. Accordingly, assuming that Ranta inherently disclosed a timer element (not admitted), Ranta would not anticipate any of the claims.

Moreover, Ranta does not disclose or suggest that timer elements define a period of a ready state of a communication unit and/or a time period for performing a location update for the communication unit, as recited by the claims. Ranta rather states that the systems are adjusted to output their position vectors less frequently. Accordingly, Ranta is approaching the position updating issue from the communication unit’s standpoint, by adjusting how often position vectors are output. In contrast, the claims recite a situation viewed from a central viewpoint, which is addressed by updating the location of the communication units less frequently, which can involve adjusting timer elements (plural), for example, one in the central location and one in the mobile unit. Therefore, Ranta cannot disclose the above-identified features, and thus does not disclose or suggest all of the elements of any of the presently pending claims.

Claims 62, 64, 76, 78, 84, 95, 97, and 103 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ranta. Applicant respectfully traverses this rejection.

Ranta has a domestic priority date of October 9, 2001, and issued June 24, 2003. Therefore, Ranta is only available as a reference (if at all) under 35 U.S.C. 102(e). Both Ranta and the present application were subject to assignment to the same entity, Nokia Corporation, at the time that the present invention was made. Therefore, 35 U.S.C. 103(c) excludes Ranta from being applied for obviousness rejections under 35 U.S.C. 103(a). As MPEP 706.02(I)(1) explains: "Effective November 29, 1999, subject matter which was prior art under former 35 U.S.C. 103 via 35 U.S.C. 102(e) is now disqualified as prior art against the claimed invention if that subject matter and the claimed invention 'were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.'" It is therefore respectfully submitted that Ranta is inappropriate prior art in this rejection. Because the rejection cannot stand without Ranta, it is respectfully requested that the rejection be withdrawn.

Claims 58, 69, and 88 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ranta in view of U.S. Patent No. 6,078,826 of Croft et al. ("Croft"). Applicant respectfully traverses this rejection.

For the reasons explained above, Ranta is not proper prior art under 103(a). Because the rejection cannot stand without Ranta, it is respectfully requested that this rejection be withdrawn.

Claims 58, 72, 83, 91, and 102 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ranta in view of U.S. Patent Application Publication No. 2004/00300601 of Pond et al. ("Pond"). Applicant respectfully traverses this rejection.

Like Ranta, Pond was also under an obligation of assignment to Nokia Corporation at the time of the invention, and only qualifies as prior art, if at all, under 35 U.S.C. 102(e). Therefore, like Ranta, Pond is not proper prior art under 103(a), for the same reasons explained above with regard to Ranta. Consequently, Applicant requests that the rejection be withdrawn.

Claims 59, 61, 63, 65, 73, 75, 77, 79, 85, 92, 94, 96, 98, and 104 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ranta in view of WO 99/52306 of Kalliokulji. Applicant respectfully traverses this rejection.

For the reasons explained above, Ranta is not proper prior art under 103(a). Because the rejection cannot stand without Ranta, it is respectfully requested that this rejection be withdrawn.

Dependent claims 54-66, 68-80, 82-85, 87-99, and 101-104 depend respectively from claims 53, 67, 81, 86, and 100, and recite additional limitations. Accordingly, each of claims 54-66, 68-80, 82-85, 87-99, and 101-104 recites subject matter that is neither disclosed nor suggested in the cited art.

For the reasons explained above, it is respectfully submitted that each of claims 53-104 recites subject matter that is neither disclosed nor suggested in the cited art. It is

therefore respectfully requested that all of claims 53-104 be allowed and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Petition for a Three-Month Extension of Time (1)
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